up copy of the amended claims and Appendix B is a clean copy of the amended claims.

REMARKS

Claims 1-24 are presently pending in the captioned application with claims 1-24 being amended and claims 25-28 being deleted without disclaimer or prejudice as to the subject matter contained therein.

Claim 1 has been amended to contain the limitations of prior claim 5 and an embodiment of the invention disclosed on page 10, lines 20-26 of the specification. Dependent claims 2-3 and 5 correspond to prior claims 2-4. Amended claim 4 is supported by the description on page 7, line 25 of the specification.

Claim 7 now contains the limitations of claim 10 and further incorporates an embodiment of the invention described on page 10, lines 20-26 of the specification. Claims 8 and 10 are dependent claims and correspond to prior claims 8-9.

Amended claim 12 is an independent claim containing the limitations of prior claim 6. Claims 13-17 are dependent upon claim 12. Amended claim 19 is an independent claim containing the limitations of prior claim 11. Claims 20-23 are dependent upon claim 19. Finally, claim 23 incorporates the feature of amended claim 7.

No new matter within the meaning of §132 has been added by any of the amendments.

Accordingly, Applicants respectfully request the Examiner to reconsider and allow all claims pending in this application.

1. Rejection of Claims 1-28 under 35 U.S.C. §102(b)

The Office Action rejects claims 1-28 under 35 U.S.C. §102(b) as being anticipated by WO 91/16376 ("WO '376"). The Office Action states:

> WO'376 discloses a packaging film with good clinging properties comprising a terpolymer of at least 50% of ethylene, 2-20% by weight of an unsaturated monocarboxylic acid having 3-8 carbon atoms and 2-20% of a moiety derived from at least one alkyl acrylate, alkyl methacrylate and mixtures thereof, wherein alkyl radical contains 2-12 carbon atoms (see page 3, lines 25-34). The low level of sorbitan fatty acid ester can be added to improve antifogging properties (see page 7, lines 9-19). This expressly meets all the limitations of the instant claims 1-4 and 12-15.
>
> WO'376 further teaches that the acid groups of the polymer of the acid containing moiety are neutralized 0-10% by at least one metal ion (see page 3, line 35 and page 4, line 1). Suitable metals are metals of Group I, II and III, out of which Zinc and Sodium are most preferable. (see page 6, lines 1-13). This expressly meets the limitations of the instant claims 7, 8, 24.

> With regard to claims 5, 10, 16-22, 25 and 27, which are concerned with the stretching properties of the films, since the films of WO'376 are identical in their chemical make-up to the instantly claimed films and are made by essentially the same method as instantly claimed films, such properties inherently present in the films of WO'376. Products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore if the prior art teaches the identical chemical structure, the properties and characteristics applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705,709,15 USPQ2d 1655,1658 (Fed. Cir. 1990). Therefore the limitations of claims 5, 10, 16-22, 25 and 27 are inherently met by WO'376.

Applicants respectfully traverse the rejection because WO '376 fails to teach all the claimed limitations of the newly amended independent claims. In particular, WO '376 fails to discloses a film having a stress in a machine direction (MD) within a range of from 20 to 40 Mpa when stretched by 100% and a ratio (MD/TD) of the stress in machine direction to the stress in traverse direction within a range of from 2 to 8 when the film is stretched by 100% in each of said directions.

Turning to the rule, the Federal Circuit has spoken clearly and at some length on the question of anticipation. Anticipation requires that each and every element of the claimed invention be disclosed in a single prior art reference. Verdegaal Bros. v.

Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Those elements must be expressly disclosed as in the claim. In re Bond, 15 USPQ2d 1566 (Fed. Cir. 1990).

The prior art reference must also be enabling, thereby placing the allegedly disclosed matter in the possession of the public. In re Brown, 329 F.2d 1006, 1011, 241 USPQ 245, 249 (C.C.P.A. 1964). In order to accomplish this, the reference must be so particular and definite that from it alone, without experiment or the exertion of his own inventive skill, any person versed in the art to which it pertains could construct and use it. Id. at 250.

In the present application, independent claim 1 recites a film for stretch-wrapping formed of a resin composition containing an ethylene/(meth)acrylic acid/(meth)acrylic acid ester terpolymer containing not more than 7% by weight of a (meth)acrylic acid ester unit and having a stress in a machine direction (MD) of said film within a range of from 20 to 40 Mpa when the film is stretched by 100%, and a ratio (MD/TD) of stress in the machine direction to the stress in a traverse direction within a range of from 2 to 8 when the film is stretched by 100% in each of said directions.

However, nothing in WO '378 teaches a film having a stress in a machine direction (MD) within a range of from 20 to 40 Mpa when stretched by 100% and a ratio (MD/TD) of the stress in machine direction to the stress in traverse direction within a range of

from 2 to 8 when the film is stretched by 100% in each of said directions.

Accordingly, Applicants respectfully submit that the presently claimed invention is not anticipated by WO '376 and respectfully request the Examiner to reconsider and withdraw the 102(b) rejection.

2. Rejection of Claims 6, 9, 11, 23, 26 and 28 under 35 U.S.C. §103(a)

The Office Action rejects claims 6, 9, 11, 23, 26 and 28 under 35 U.S.C. §103(a) as obvious over WO '376. The Office Action states:

> The above claims are product-by-process claims, wherein the limitation not disclosed in WO'376 is that the film is made by a T-die method. However, in terms of the chemical components and their amounts in a terpolymer the films of WO'376 and the instant claims are identical, which was addressed in the 102(b) rejection. Furthermore, both films are prepared by an extrusion method, the non-specified difference is the shape of die. Applicants are reminded that patentability of the product is based on the product formed - not by method by which it was produced, In re Thorpe, 777 F 2d 695, 227, USPQ 964 (Fed. Cir 1985).
>
> Furthermore, because of the nature of product-by-process claims, the Examiner cannot ordinarily focus on the precise difference between the claimed product and the disclosed product. It is then Applicants' burden to

> prove that an unobvious difference exists. See In re Marosi, 218 USPQ 289, 292-293 (CAFC 1983). See also footnote 11 O.G. Notice 1162 59-61, wherein a 35 USC 102/103 rejection is authorized in the case of product-by-process claims because the exaxt identity of the claimed product or the prior art product cannot be determined by the Examiner. In re Brown, 173 USPQ 685 (CCPA 1972), the Court of Customs and Patent Appeals (CCPA) explicitly approved the 102/103 rejection of a product-by-process claim over a reference which showed a product which appeared to be identical or only slightly different from the claimed product.

Applicants respectfully traverse the rejections because WO '376 does not provide any suggestion or motivation to make the claimed invention. Even assuming *arguendo* that a *prima facie* exists, the claimed films demonstrate unexpectedly superior tensile properties over the prior art. Clearly, one of ordinary skill in the art would have no motivation to modify the reference to derive the subject matter as defined in the subject claims. Applicants note that the product-by-process claims 6, 9, 11 and 23 now correspond to independent claim 12.

Turning to the rule, the Federal Circuit held that a *prima facie* case of obviousness must establish: (1) some suggestion or motivation to modify the references; (2) a reasonable expectation of success; and (3) that the prior art references teach or suggest all claim limitations. Amgen, Inc. v. Chugai Pharm. Co., 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); In re Fine, 5 USPQ2d 1596, 1598 (Fed.

Cir. 1988); In re Wilson, 165 USPQ 494, 496 (C.C.P.A. 1970).

A *prima facie* case of obviousness must also include a showing of the reasons why it would be obvious to modify the references to produce the present invention. See Ex parte Clapp, 277 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). The Examiner bears the initial burden to provide some convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings. Id. at 974.

In the present application, claim 12 recites a film for stretch-wrapping formed of a resin composition containing, as a chief component, an ethylene/(meth)acrylic acid/(meth)acrylic acid ester terpolymer that contains not more than 7% by weight of a (meth)acrylic acid ester unit, wherein the forming of said film is effected according to the T-die method. However, one of ordinary skill in the art would not have had any motivation to make the presently claimed invention.

In particular, it is critical that wrapping films of the presently claimed invention contain specific amounts of terpolymer resin containing (meth)acrylic acid ester unit in a relatively low range. The range should not be more than 7% by weight and, particularly, not smaller than 0.1% by weight.

The reason for this limitation is because films exhibit large stresses when stretched in a machine direction compared to

conventional stretch-wrapping films. Films comprising the ethylene/(meth)acrylic acid dipolymer without (meth)acrylic acid ester units exhibit high rigidity and hardness unsuitable for wrapping. On the other hand, a ester unit larger than the presently claimed range the stretch-wrapping film cannot withstand stresses resulting from automatic wrapping and stretch-wrapping.

Clearly, one of ordinary skill would not have been motivated to make the claimed limitations in the absence of any such teachings in WO '376. Although the claimed methacrylate range of not more than 7% by weight and not smaller than 0.1% falls within the range taught by WO '376, the claimed range is unobvious because the percentage of methacrylate units is not a result-effective variable within the field of stretch-wrapping films. In other words, the WO '376 reference does not teach that optimization of the percentage of methacrylate units gives rise to a improved stress properties for stretch-wrapping films. See In re Antoine, 195 UPSQ 6 (C.C.P.A. 1977).

That WO '36 teaches alkyl(meth)acrylate component over a wide range from 2 to 20% by weight further indicates that the cited reference does not disclose or suggest the critical feature of the present invention. Clearly, one of ordinary skill in the art would have no motivation to selectively use terpolymer containing an ester unit in an amount of not more than 7% by weight and,

particularly, in a low range of from 0.1 to smaller than 5% by weight in order to maintain good balance between large stress when stretched and the stretch-wrapping performance. Accordingly, the claimed range is unobvious even though it is within the range disclosed by WO '376.

Moreover, WO '376 is non-analogous art. The object of WO '376 is to replace highly plasticized PVC (page 1, lines 28-34). Therefore, one of ordinary skill attempting to improve stretch properties would not look to WO '376 because nothing in WO '376 relates to stress characteristics and stress anisotropy. In other words, no teachings relate to stretching wrapping film similar to the present invention, i.e. stress in a machine direction of 20 to 40 Mpa when stretched by 100%, the MD/TD stress ratio of 2 to 8 when stretched by 100%.

Further still, WO'376 fails to teach the limitation of neutralizing with an alkali metal. This is not taught in WO'376, which simply references "suitable metals include those from groups I, II, III, IV-a and VII" at page 6, lines 3-5, as suitable. In particular, WO '376 discloses at page 6, lines 14-16, that it is preferred that the polymer be not neutralized. Moreover, the only example of an ionomer is example 7 of WO '376 disclosing a terpolymer of example 6 (6% IBA) neutralized with zinc ions to about 5% level.

But as the court stated in In re Corkill, "a greater than expected result is an evidentiary factor pertinent to the legal conclusion of [non]obviousness". 711 F.2d 1496, 266 USPQ 1005 (Fed. Cir. 1985). Clearly, an unexpected improvement in tensile strength based on specific percentages of methacrylic acid as well neutralization is unobvious from the prior art. The claimed range as claimed by Applicants confers a significant, practical advantage. Based upon the above observations the films are superior to compositions known in the prior art.

Accordingly, Applicants respectfully submit that the presently claimed invention is unobvious over WO '376 and respectfully request the Examiner to reconsider and withdraw the rejection of the presently pending claims under 35 U.S.C. §103.

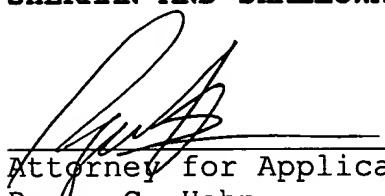
CONCLUSION

In light of the foregoing, Applicants submit that the application is now in condition for allowance. The Examiner is therefore respectfully requested to reconsider and withdraw the rejection of the pending claims and allow the pending claims. Favorable action with an early allowance of the claims pending is

earnestly solicited.

Respectfully submitted,

SHERMAN AND SHALLOWAY



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Group Art Unit: 1713
	)	
YOSHIKAWA; KAMIKUZU	)	Examiner: Zalukaeva, Tatyana
	)	
Serial No. 09/719,086	)	
	)	
Filed: March 2, 2001	)	

For: **FILM FOR WRAPPING**

Appendix A

Please amend the following claims as indicated in the following marked-up copy of the claims.

1. (Amended) A film for stretch-wrapping formed of a resin composition containing, as a chief component, an ethylene/(meth)acrylic acid/(meth)acrylic acid ester terpolymer that contains not more than 7% by weight of a (meth)acrylic acid ester unit, [and, optionally, containing an anti-fogging agent or a tackifier] having a stress in a machine direction (MD) of said film within a range of from 20 to 40 Mpa when the film is stretched by 100%, and a ratio (MD/TD) of stress in the machine direction to the stress in a traverse direction within a range of from 2 to 8 when the film is stretched by 100% in each of said directions.

2. (Amended) [A] The film for stretch-wrapping [formed of a resin composition containing, as a chief component, an ethylene/(meth)acrylic acid/(meth)acrylic acid ester terpolymer] according to claim 1, wherein said terpolymer is the one that contains less than 5% by weight of a (meth)acrylic acid ester unit [, and, optionally, containing an anti-fogging agent or a tackifier].

3. (Twice amended) [A] The film for stretch-wrapping according to [claim 1] claim 2, wherein said terpolymer is the one that contains from 5 to 20% by weight of a (meth)acrylic acid unit, and not less than 0.1% by weight but less than 5% by weight of a (meth)acrylic acid ester unit.

4. (Twice amended) [A] The film for stretch-wrapping according to [claim 1] claim 3, wherein [the alkyl group of the (meth)acrylic acid ester has from 1 to 10 carbon atoms] said terpolymer is the one that contains from 8 to 15% by weight of a (meth)acrylic acid unit.

5. (Twice amended) [A] The film for stretch-wrapping according to claim 1, wherein the [stress in the machine

direction of when the film is stretched by 100% lies within the range of from 20 to 40 Mpa] alkyl group of the (meth)acrylic acid ester has from 1 to 10 carbon atoms.

6. (Twice amended) [A] The film for stretch-wrapping according to claim 1, [wherein the forming of the film is effected according to the T-die method] the film further containing an anti-fogging agent or a tackifier.

7. (Amended) A film for stretch-wrapping formed of a resin composition containing, as a chief component, an ionomer obtained by ionizing with an alkali metal, an ethylene/(meth)acrylic acid/(meth)acrylic acid ester terpolymer that contains less than 5% by weight of a (meth)acrylic acid ester unit, [and, optionally, containing an anti-fogging agent or a tackifier] having a stress in machine direction (MD) of said film within a range of from 20 to 40 Mpa when the film is stretched by 100%, and a ratio of the stress in machine direction to the stress in a traverse direction within a range of from 2 to 8 when the film is stretched by 100% in each of said directions.

8. (Amended) [A] The film for stretch-wrapping according to claim 7, wherein said terpolymer is the one that contains from 5 to 20% by weight of a (meth)acrylic acid unit, and not less than 0.1% by weight but less than 5% by weight of a (meth)acrylic acid ester unit, and the ionomer has an ionization degree of [from] 0.1 to 30 [%].

9. (Twice amended) [A] The film for stretch-wrapping according to [claim 7] claim 8, wherein [the alkyl group of the (meth)acrylic acid ester has from 1 to 10 carbon atoms] said terpolymer is the one that contains from 8 to 15% by weight of a (meth)acrylic acid unit.

10. (Twice amended) [A] The film for stretch-wrapping according to claim 7, wherein the [stress in the machine direction of when the film is stretched by 100% lies within a range of from 20 to 40 Mpa] alkyl group of the (meth)acrylic acid ester has from 1 to 10 carbon atoms.

11. (Twice amended) [A] The film for stretch-wrapping according to claim 7, [wherein the forming of the film is

effected according to the T-die method] the film further containing an anti-fogging agent or a tackifier.

12. (Amended) A film for stretch-wrapping [according to claim 2, wherein said terpolymer is the one that contains from 5 to 20% by weight of a (meth)acrylic acid, and not less than 0.1% by weight but less than 5% by weight of a (meth)acrylic acid ester] formed of a resin composition containing, as a chief component, an ethylene/(meth)acrylic acid/(meth)acrylic acid ester terpolymer that contains not more than 7% by weight of a (meth)acrylic acid ester unit, wherein the forming of said film is effected according to the T-die method.

13. (Amended) [A] The film for stretch-wrapping according to claim [2] 12, wherein [the alkyl group of the (meth)acrylic acid ester has from 1 to 10 carbon atoms] said terpolymer containing not more than 5% by weight of a (meth)acrylic acid ester unit.

14. (Amended) [A] The film for stretch-wrapping according to claim [3] 13, wherein [the alkyl group of the (meth)acrylic acid ester has from 1 to 10 carbon atoms] said terpolymer

containing from 5 to 20% by weight of a (meth)acrylic acid unit, and not less than 0.1% by weight but less than 5% by weight of (meth)acrylic acid ester unit.

15. (Amended) [A] The film for stretch-wrapping according to claim [12] 14, wherein [the alkyl group of the (meth)acrylic acid ester has from 1 to 10 carbon atoms] said terpolymer containing from 8 to 15% by weight of a (meth)acrylic acid unit.

16. (Amended) [A] The film for stretch-wrapping according to claim [2] 12, wherein the [stress in the machine direction of when the film is stretched by 100% lies within the range of from 20 to 40 Mpa] alkyl group of the (meth)acrylic acid ester has from 1 to 10 carbon atoms.

17. (Amended) [A] The film for stretch-wrapping according to [claim 3] claim 12, [wherein the] having a stress in the machine direction [of when the film is stretched by 100% lies within the range of from 20 to 40 Mpa] (MD) of said film within a range of from 20 to 40 Mpa when the film is stretched by 100%, and a ratio of the stress in a machine direction to the stress

in a traverse direction within a range of from 2 to 8 when the film is stretched by 100% in each of said directions.

18. (Amended) [A] The film for stretch-wrapping according to claim [4] 12, [wherein the stress in the machine direction of when the film is stretched by 100% lies within the range of from 20 to 40 Mpa] the film further containing an anti-fogging agent or a tackifier.

19. (Amended) [A] The film for stretch-wrapping [according to claim 12, wherein the stress in the machine direction of when the film is stretched by 100% lies within the range of from 20 to 40 Mpa] formed of a resin composition containing, as a chief component, an ionomer obtained by ionizing with an alkali metal, an ethylene/(meth)acrylic acid/(meth)acrylic acid ester terpolymer that contains less than 5% by weight of a (meth)acrylic acid ester unit, wherein the forming of said film is effected according to the T-die method.

20. (Amended) [A] The film for stretch-wrapping according to claim [13] 19, wherein [the stress in the machine direction of when the film is stretched by 100% lies within the range of

from 20 to 40 Mpa] said terpolymer is the one that contains from 5 to 20% by weight of a (meth)acrylic acid unit, and not less than 0.1% by weight but less than 5% by weight of (meth)acrylic acid ester unit, and the ionomer has an ionization degree of 0.1 to 30.

21. (Amended) [A] The film for stretch-wrapping according to claim [14] 20, wherein [the stress in the machine direction of when the film is stretched by 100% lies within the range of from 20 to 40 Mpa] said terpolymer is the one that contains from 8 to 15% by weight of a (meth)acrylic acid unit.

22. (Amended) [A] The film for stretch-wrapping according to claim [15] 19, wherein the [stress in the machine direction of when the film is stretched by 100% lies within the range of from 20 to 40 Mpa] alkyl group of the (meth)acrylic acid ester has from 1 to 10 carbon atoms.

23. (Amended) [A] The film for stretch-wrapping according to [claim 2] claim 19, [wherein the forming of the film is effected according to the T-die method] having a stress in a machine direction (MD) of said film within a range of from 20 to

40 Mpa when the film is stretched by 100%, and a ratio of the stress in a machine direction to the stress in a traverse direction within a range of from 2 to 8 when the film is stretched by 100% in each of said directions.

24. (Amended) [A] The film for stretch-wrapping according to claim [8] 19, [wherein the alkyl group of the (meth)acrylic acid ester has from 1 to 10 carbon atoms] the film further containing an anti-fogging agent or a tackifier.

25. (Delete)

26. (Delete)

27. (Delete)

28. (Delete)